

REMARKS

The Office Action, dated December 11, 2007, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Applicants herein amended claims 1, 3-8, 13-16, and 18-19, deleted claims 2, 10-12, and 17, and added new claims 20-32 to more particularly point out and distinctly claim the subject matter of the present invention. No new matter is added. Claims 1, 3-4, 7-9, 13-16, and 18-32 are respectfully submitted for consideration.

Claims 1-7 and 16 were rejected under 35 U.S.C. 103(a) as being obvious over EP 0981229 to Hwang et al. (Hwang), in view of US Patent No. 6,785,262 to Yao et al. (Yao). The Office Action took the position that Hwang disclosed all of the features of these claims except a controller, wherein the communications resources are allocated, and wherein the indication is a coded value of a length of a data queue. The Office Action asserted that Yao disclosed such features. Applicants respectfully submit that the cited references, taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims.

Claim 1, from which claims 3-4, 7 and 16 depend, is directed to a method. An indication of future need of communication resources in a first network element is monitored. where the indication includes a coded value of a length of a data queue in the first network element. Then, the communications resources are allocating for a transmission between the first network element and a second network element based on the indication.

Applicants respectfully submit that the cited references fail to disclose or suggest all of the features of any of the pending claims.

Hwang is directed to controlling asymmetric dynamic radio bearers in mobile packet data communications. Hwang describes establishing a plurality of radio bearers having a predetermined data. The amount of data stored in a transmit buffer during transmission of the mobile data is examined. The mobile packet data is transmitted with the number of the radio bearers increased or decreased according to the amount of data in the transmit buffer. See, for example, paragraph [0025].

Yao is directed to the reduction of voice latency in a voice over data wireless communication system. Yao discloses that vocoder frames are stored in the queue 408. The vocoder frames are later digitally modulated and upconverted for wireless transmission. See col. 9 lines 17-20. Yao further discloses that the data stream 500 as shown in Fig. 5, represents the contents of the queue 408. A processor determines quality of the communications channel by determining the length of the queue. See col. 12, lines 6-8.

The Office Action admitted that Hwang failed to disclose the feature of a controller, wherein the communications resources are allocated, and wherein the indication is a coded value of a length of a data queue, and relied on Yao to disclose this feature. Applicants respectfully submit that Yao fails to cure the admitted deficiencies of Hwang.

More specifically, Applicants respectfully submit that Yao fails to disclose or suggest the feature a coded value as an indication of the length of the data queue. The

data stream 500 shows the actual contents of the queue and is not a coded indication of the queue's length. At best, it is an indication of the data rate. See col. 9, lines 57-59. Further, while Yao may disclose determining the quality of the communications channel by examining the length of the queue, Yao is silent with regards to generating a coded representation of the data queue's length. Thus, Yao merely discloses a coded value of the data rate, and in an unrelated process, uses the length of the queue to determine a rate at which frames are dropped. Thus, Yao fails to cure the admitted deficiencies of Hwang.

The Response to Arguments section of the Office Action alleged that that this feature is disclosed in Yao. However, as admitted in the Office Action, Yao merely discloses a vocoder frame that contains a number of information bits depending on the data rate for the particular frame. The Office Action also asserted that Yao teaches that the processor can determine the channel quality based on the length of the data queue. As discussed in Applicant's previous correspondence, Applicants maintain that Yao is silent with regards to a coded representation of the data queues length. The mere mention of "information bits" and "length of the data queue" within the same document (Yao) does not equate to a disclosure of a coded representation of the data queue's length, by any reasonable interpretation.

Applicants respectfully submit that based on the above, the cited references of Hwang and Yao, also fail to disclose or suggest at least the features of sending the indication from the first network element to a controller, wherein the indication is a coded value of a length of a data queue, controlling the communication resources between the first network element and a second network element based on this

indication, and controlling communications resources in a transmission from the first network element to the second network element, wherein the communication resources are allocated by the controller, as recited in claim 1.

Applicants further submit that because claims 3-4, 7, and 16 depend from claim 1, these claims are allowable at least for the same reasons as claim 1, as well as for the additional features recited in these dependent claims.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in claims 1, 3-4, 7 and 16. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested. For similar reasons, new claim 31, although different in scope from claim 1, is also allowable. Consideration and allowance of claim 31 are therefore requested.

The Office Action rejected claims 8-10, 12, 13 and 17 under 35 U.S.C. 103(a) as being obvious over Yao and Hwang. The Office Action asserted that Yao disclosed all of the features of these claims except that the allocation being performed in accordance with information transmitted from the first stations which indicate a need for communication resources. The Office Action asserted that Hwang disclosed this feature. Applicants respectfully submit that the cited references, taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims.

Claim 8, from which claims 9 and 13, is directed to a system. First stations connect to a second station through communication links. A controller is configured to control the allocation of the communication resources among the communications links, and this controller is separate and independent from the first stations. The allocation is

performed in accordance with information transmitted from the first stations, wherein the information includes a coded value of a length of a data queues in each of the first stations.

Hwang and Yao are discussed above. Applicants respectfully submit that the cited references fail to disclose or suggest at least the feature of a controller configured to control the allocation of the communication resources among the links, the controller being separate and independent from the first stations, the allocation being performed in accordance with information transmitted from the first stations to indicate a need for communication resources based upon lengths of data queues in the first stations, and the information includes a coded value of the lengths of the data queues, as recited in claim 8.

As discussed above, the cited references in particular Yao fails to disclose or suggest the feature of a coded value as an indication of the length of the data queue. In Yao, the data stream 500 shows the actual contents of the queue and is not a coded indication of the queue's length. At best, it is an indication of the data rate. See col. 9 lines 57-59. Further, as also discussed above, Hwang fails to disclose or suggest the recitation of the allocation being performed in accordance with information transmitted from the first stations which indicate a need for communication resources because Hwang is silent with regards to allocating bandwidth.

Applicants further submit that because claims 9 and 13 depend from claim 8, these claims are allowable at least for the same reasons as claim 8 as well as for the additional features recited in these dependent claims.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in claims 8, 9, and 13. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

The Office Action rejected claim 11 under 35 U.S.C. 103(a) as being obvious over Yao and Hwang, in further view of US Patent No. 6,975,604 to Ishida et al. (Ishida). The Office Action took the position that Yao and Hwang disclosed all of the features of claim 11 except a data generator. The Office Action asserted that Ishida disclosed this feature. Applicants respectfully submit that the cited references, taken individually or in combination, fail to disclose or suggest all of the features recited in claim 11. Claim 11 is currently cancelled, so this rejection is now moot.

The Office Action rejected claims 14 and 18 under 35 U.S.C. 103(a) as being obvious over Yao. The Office Action asserted that Yao disclosed all of the features of these claims except decoding a code representative of a length of the data queue in at least one mobile station. The Office Action took the position that it would have been obvious for one skilled in the art to include a decoder because the decoder would decode the data frames generated by the voice encoder 406 based on the length of the queue. Applicants respectfully submit that Yao fails to disclose or suggest all of the features recited in any of the above claims.

Claim 14, from which claims 18 and 26-28 depend, relates to an apparatus, that includes a controller configured to control allocation of communication resources for at

least one mobile stations, where in the allocation is based upon received queue length information for each of the at least one mobile stations

Yao is discussed above. Applicants further submit that Yao fails to disclose or suggest at least the feature of a base station that includes a decoder and a controller as recited in claims 14 and 18.

The decoder 614 in Yao is a part of a receiver unit 600 that receives vocoder frames generated by the TCP processor, to generate a digitized replica of the original signal transmitted from the transmitter 400. See Figs. 4 and 6, column 13 lines 55-60. Yao does not disclose or suggest a base station that includes a decoder and a controller as recited in claims 14 and 18. Thus, Applicants submit that the Office Action is inappropriately reading features into Yao. Accordingly, Yao fails to disclose or suggest all of the features recited in claim 14.

Applicants further submit that because claim 18 depends from claim 14, claim 18 is allowable at least for the same reasons as claim 14, as well as for the additional features recited in this dependent claim.

Based at least on the above, Applicants respectfully submit that Yao fails to disclose or suggest all of the features of claims 14 and 18. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested. Likewise, new claims 26-28 depend from claim 14 and are allowable on similar grounds. For similar reasons, new claim 20, although different in claim scope, is similarly allowable. Consideration and allowance of claims 20 and 26-28 are requested.

The Office Action rejected claims 15 and 19 under 35 U.S.C. 103(a) as being obvious over Yao, in view of Ishida. The Office Action took the position that Yao disclosed all of the features of these claims except a data generator. The Office Action asserted that Ishida disclosed this feature. Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims.

Claim 15, from which claims 19 and 29-30 depend, relates to an apparatus that includes a data generator and a data queue that is configured to receive data packets from the data generator. An encoder configured to encode a code representative of a length of the data queue, and a transmitter configured to transmit data with said code included therein as a field.

Applicants respectfully submit that the cited references fail to disclose or suggest at least the features of a data queue is configured to receive data packets from the data generator as recited in claim 15.

As discussed above, Ishida discloses a generator. However, the generator merely sends data to an encoder circuit 616. As recited in claims 15 and 19, the data generator data produced from the data generator 20 is sent to the data queue 22. This feature is neither disclosed nor suggested in Ishida.

Further, Applicants note that this feature is not addressed in the Office Action. Thus, in the event that the application is not in condition for allowance, Applicants respectfully request a new non-final Office Action that completely addresses all of the recited elements of claims 15 and 19.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in claims 15 and 19. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested. Likewise, new claims 29-30 depend from claim 15 and are allowable on similar grounds. For similar reasons, new claims 22-25 and 32, although different in scope from claim 14, are allowable on similar grounds. Likewise, Applicants further submit that because claim 23-25 depend from claim 22, claims 23-25 are allowable at least for the same reasons as claim 15, as well as for the additional features recited in these dependent claims.

As stated above ,new claims 20-32 are added, and each of claims 20-32 recite features that are neither disclosed nor suggested in any of the cited references.

Applicants respectfully submit that each of claims 1, 3-4, 7-9, 13-16, and 18-32 recites features that are neither disclosed nor suggested in any of the cited references. Accordingly, it is respectfully requested that each of claims 1, 3-4, 7-9, 13-16, and 18-32 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



David D. Nelson
Registration No. 47,818

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
8000 Towers Crescent Drive, 14TH Floor
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

DDN/cqc

Enclosures: RCE Transmittal
Additional Claims Transmittal
Check No. 018166